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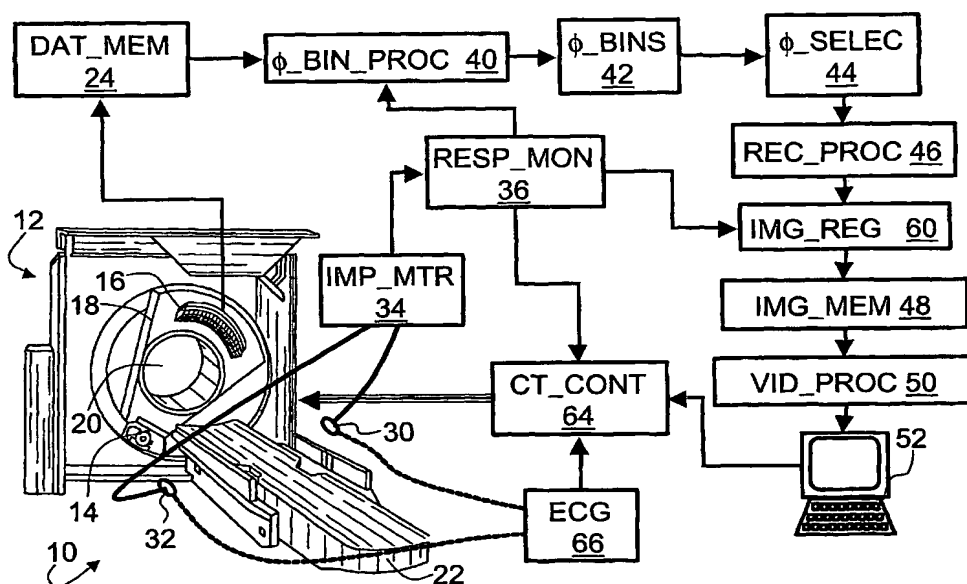
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(54) Title: RESPIRATION MONITOR FOR COMPUTED TOMOGRAPHY



(57) Abstract: A medical diagnostic imaging system (10) includes a diagnostic imaging scanner (12) that acquires imaging data of a medical imaging patient. A reconstruction processor (46) reconstructs at least a portion of the acquired imaging data into an image representation. A pair of electrodes (30, 32) contact a thoracic region of the patient. An electrical meter (34) measures electrical resistance  $R(t)$  or another time-varying electrical parameter (70) across the electrode pair (30, 32) during the acquiring of imaging data. A respiration monitor (36) extracts a time-varying respiration characteristic (90, 98, 110, 120) from the measured time-varying electrical parameter (70) to indicate respiratory cycle phase.

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*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*